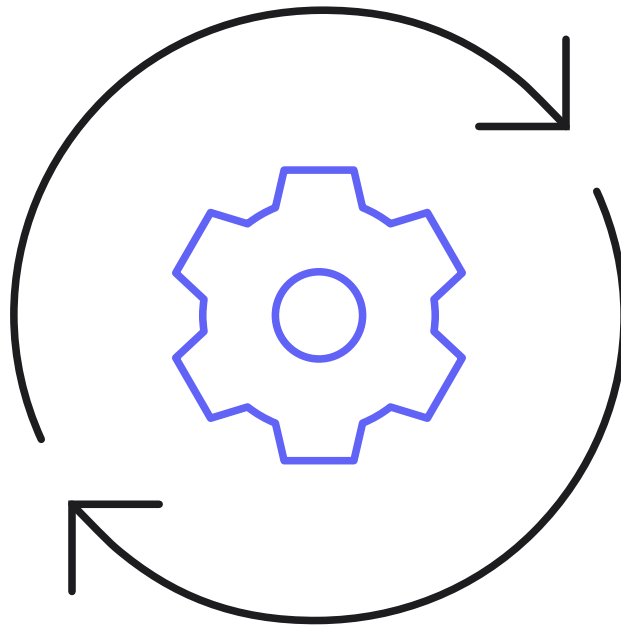


Developing in-house VS off-the-shelf software solutions



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For many years, business leaders in several industries, including higher education, have questioned whether it's better to build or buy software solutions for the many business problems they face. Pros and cons are weighed as they try their best to find the most cost effective and efficient solution for their business.

The pace of technology innovation is accelerating at an almost exponential rate, making it difficult for the average internal IT groups to keep up with the pace of change. The struggle commonly lies in the fact that they not only have to create the software internally, but they must also maintain and upgrade it indefinitely.

According to an IBM study, 60% of in-house projects fail to meet schedule, budget and quality goals.

Since the introduction of cloud computing, most large global enterprises in both public and private sectors see their future in the cloud. As a result, they are rapidly changing the focus of their in-house IT environments, dramatically reducing their IT operational costs as well as their historical reliance on internal IT staff for software development and support.

In that environment, it's tough for internal products to compete with more robust off-the-shelf solutions, which are specialised and provide a stable platform on which your custom workflow procedures and processes may be built. It is the combination of a strong, stable and specialised solution, with the flexibility to tailor and add functions and procedures quickly, that characterises the modern SaaS.

When deciding whether to buy or build software, you need to think about three key factors:



What is the scope of the business problem you are trying to address with this software, and how complex does your solution need to be to suit your business size and needs?



Does your organisation currently have (or can hire) experts capable of building, maintaining and supporting the solution?



Is using the software critical to your business operations, or can you afford to wait while an internal solution is developed?

The pros and cons can be summarised as follows

IN-HOUSE DEVELOPMENT

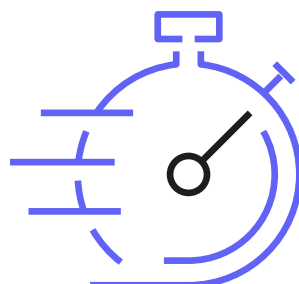
PROS

- Total control over development and features
- Ownership of the software code
- Built to fit in with existing in-house systems

CONS

- High risk of failure
- Clearly defining the project and specifications is an involving task. Both operational and technical staff need to be involved, using up valuable man hours
- Tight deadlines and time constraints: **the reality is that complex projects can take twice as long and cost up to three times the estimated budget**
- Your in-house IT team might not have the skill set required for certain areas of development
- De-bugging issues can be prolonged
- The system may have little inherent flexibility and scalability
- Modular upgrades unlikely to be available
- There is an over reliance on one department to produce the goods

Most of the time, one person simply isn't going to get your project done. The general rule of thumb is that if you plan to invest more than £20,000 in your project, you don't need a developer; you need a dream team.



OFF-THE-SHELF

PROS

- It is tried and tested
- There is no need to re-invent the wheel. Specialised software solutions have already been designed to cater for the problems you're looking to address
- Thousands of hours of research and development have gone into creating the product already
- Greater flexibility and adaptability
- The implementation time will be shorter and measured in weeks rather than years
- Expert support and training available
- Continuous software enhancement through customer output

CONS

- The university does not retain the rights
- There is the risk of the vendor being slow to react to market trends or reluctant to adapt the software
- There could be potential integration issues with your current systems
- Support and maintenance costs may be too high

SPECIFIC RISKS OF IN-HOUSE DEVELOPMENT

RISK 1

Workload (and thus labor cost) is underestimated

The development of a solution from the ground up demands hundreds of thousands of hours. FULL FABRIC invests over 20 thousand man-hours per year to maintain and develop improvements to its system. A baseline (or starting point) system may easily demand a five-year development cycle with a team of at least five members.

Of course, software development is not a university's core competency. Multiple analysts, designers, developers, database specialists, testers, technical writers and a project manager are required

RISK 2

Maintenance and support are underestimated

The modern university is constantly evolving and its business grows, as do its needs and demands. And best practices are constantly being implemented.

At the same time, users need suitable technical support to answer their questions and keep things running smoothly. A good help desk requires trained staff and specialised infrastructure.

RISK 3

Dependence On People

In-house development projects are rarely well documented. Therefore, subsequent developments depend on people and not on standardised design processes. The risk is that the developers of the original application may someday leave the company.

SUMMARY

Looking closer at the pros and cons of each option, it appears that the perceived costs along with specific business functionality are likely to be the key factors in deciding to go with in-house development. In reality, the costs quickly mount up, resulting in a far larger investment than originally projected.

The lifeblood of a software company is the development of new technologies and they invest internally in research and development to keep their product useful for clients.

A good software vendor will thoroughly analyse your current processes, and make modifications to the off-the-shelf package where applicable, giving you a solution that truly fits in with your business.

MEET FULL FABRIC

We're on a mission to improve student relationship management

Full Fabric was established in 2011 by founders with hands-on experience in higher education and technology.

We remain a founder-managed company and are based in central London.

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